

## REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

the same length and fully complementary to the nucleotide base sequence of said region and, optionally, a sequence recognized by an RNA polymerase.

01  
Cnd  
- 71. (Three Times Amended) The primer oligonucleotide of claim 67 further comprising a sequence recognized by an RNA polymerase.

02  
- 80. (Four Times Amended) The composition of claim 79, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said third region.

03  
- 86. (Three Times Amended) The composition of claim 84, wherein:  
said first primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region; and  
wherein said second primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region.

04  
- 90. (Three Times Amended) The composition of claim 89, wherein:  
said first primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region;  
said second primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region; and  
said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said third region.

05  
- 151. (Four Times Amended) The primer oligonucleotide of claim 147, wherein said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

152. (Four Times Amended) The primer oligonucleotide of claim 147, wherein the nucleotide base sequence of said primer oligonucleotide is of the same length and fully complementary to the nucleotide base sequence of said region and, optionally, a sequence recognized by an RNA polymerase.

180. (New) The kit of claim 39, wherein each of said first and second oligonucleotides is up to 60 nucleotide bases in length.

181. (New) The kit of claim 39, wherein:  
the nucleotide base sequence of said first oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 22 and, optionally, a sequence recognized by an RNA polymerase; and

the nucleotide base sequence of said second oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 2 and, optionally, a sequence recognized by an RNA polymerase.

182. (New) The oligonucleotide of claim 40, wherein said oligonucleotide is up to 60 nucleotide bases in length.

183. (New) The oligonucleotide of claim 40, wherein the nucleotide base sequence of said oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 22 and, optionally, a sequence recognized by an RNA polymerase.

184. (New) The kit of claim 41, wherein:  
the nucleotide base sequence of said first oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 3; and

REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

the nucleotide base sequence of said second oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 22 or SEQ ID NO: 2 and, optionally, a sequence recognized by an RNA polymerase.

185. (New) The kit of claim 42, wherein:

the nucleotide base sequence of said first oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 8; and

the nucleotide base sequence of said second oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 23 or SEQ ID NO: 7 and, optionally, a sequence recognized by an RNA polymerase.

186. (New) The primer oligonucleotide of claim 73, wherein the nucleotide base sequence of said primer oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 1.

187. (New) The composition of claim 75, wherein each of said first and second primer oligonucleotides is up to 60 nucleotide bases in length.

188. (New) The composition of claim 75, wherein:

said first primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region; and

said second primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region.

189. (New) The composition of claim 75, wherein:

the nucleotide base sequence of said first primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region and, optionally, a sequence recognized by an RNA polymerase; and

REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

the nucleotide base sequence of said second primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase.

190. (New) The composition of claim 79, wherein:

said first primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region;

said second primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region; and

said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said third region;

191. (New) The composition of claim 79, wherein:

the nucleotide base sequence of said first primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region and, optionally, a sequence recognized by an RNA polymerase;

the nucleotide base sequence of said second primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase; and

the nucleotide base sequence of said probe consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said third region.

192. (New) The composition of claim 84, wherein each of said first and second primer oligonucleotides is up to 60 nucleotide bases in length.

REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

193. (New) The composition of claim 84, wherein:

the nucleotide base sequence of said first primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region and, optionally, a sequence recognized by an RNA polymerase; and

the nucleotide base sequence of said second primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase.

194. (New) The composition of claim 89, wherein:

the nucleotide base sequence of said first primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region and, optionally, a sequence recognized by an RNA polymerase;

the nucleotide base sequence of said second primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase; and

the nucleotide base sequence of said probe consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said third region.

195. (New) The probe mix of claim 96, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

196. (New) The probe mix of claim 96, wherein the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said region.

## REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

197. (New) The probe mix of claim 98, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

198. (New) The probe mix of claim 98, wherein the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said region.

199. (New) The kit of claim 100, wherein:  
the nucleotide base sequence of said first oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 23 and, optionally, a sequence recognized by an RNA polymerase; and

the nucleotide base sequence of said second oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 7 and, optionally, a sequence recognized by an RNA polymerase.

200. (New) The composition of claim 101, wherein:  
said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region; and  
said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region.

201. (New) The composition of claim 101, wherein:  
the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said first region; and  
the nucleotide base sequence of said primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase.

## REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

202. (New) The oligonucleotide of claim 143, wherein said oligonucleotide is up to 60 nucleotide bases in length.

203. (New) The composition of claim 143, wherein the nucleotide base sequence of said oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 23 and, optionally, a sequence recognized by an RNA polymerase.

204. (New) The kit of claim 158, wherein said primer oligonucleotide is up to 60 nucleotide bases in length.

205. (New) The kit of claim 158, wherein said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

206. (New) The kit of claim 158, wherein the nucleotide base sequence of said primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region and, optionally, a sequence recognized by an RNA polymerase.

207. (New) The composition of claim 159, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

208. (New) The composition of claim 159, wherein the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said region.

REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

209. (New) The composition of claim 160, wherein:  
- said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region; and  
said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region;

210. (New) The composition of claim 160, wherein:  
the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said first region; and  
the nucleotide base sequence of said primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase.

211. (New) The kit of claim 162, wherein said primer oligonucleotide is up to 60 nucleotide bases in length.

212. (New) The kit of claim 162, wherein said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region.

213. (New) The kit of claim 162, wherein the nucleotide base sequence of said primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region and, optionally, as sequence recognized by an RNA polymerase.



REPLY

Serial No. 08/480,472

Atty. Docket No. GP034-03.DV1

214. (New) The composition of claim 163, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

215. (New) The composition of claim 163, wherein the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said region.

216. (New) The composition of claim 164, wherein:  
said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region; and  
said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region.

217. (New) The composition of claim 164, wherein:  
the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said first region; and  
the nucleotide base sequence of said primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase.

218. (New) The kit of claim 166, wherein said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

219. (New) The kit of claim 166, wherein the nucleotide base sequence of said primer oligonucleotide consists a nucleotide base sequence of the same length and fully

REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

complementary to the nucleotide base sequence of said region and, optionally, a sequence recognized by an RNA polymerase.

220. (New) The composition of claim 167, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

221. (New) The composition of claim 167, wherein the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said region.

222. (New) The kit of claim 173, wherein each of said first and second primer oligonucleotides is up to 60 nucleotide bases in length.

223. (New) The kit of claim 173, wherein:  
said first primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region; and  
said second primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region.

224. (New) The kit of claim 173, wherein:  
the nucleotide base sequence of said first primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said first region and, optionally, a sequence recognized by an RNA polymerase; and  
the nucleotide base sequence of said second primer oligonucleotide consists of a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said second region and, optionally, a sequence recognized by an RNA polymerase.

REPLY

Serial No. 08/480,472  
Atty. Docket No. GP034-03.DV1

225. (New) The probe of claim 176, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

226. (New) The probe of claim 176, wherein the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said region.

227. (New) The probe of claim 177, wherein said probe comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

228. (New) The probe of claim 177, wherein the nucleotide base sequence of said probe is of the same length and fully complementary to the nucleotide base sequence of said region.

229. (New) The oligonucleotide of claim 178, wherein the nucleotide base sequence of said oligonucleotide consists of the nucleotide base sequence of SEQ ID NO: 7.

230. (New) The kit of claim 179, wherein said primer oligonucleotide comprises a nucleotide base sequence of the same length and fully complementary to the nucleotide base sequence of said region.

231. (New) The kit of claim 179, wherein the nucleotide base sequence of said primer oligonucleotide is of the same length and fully complementary to the nucleotide base sequence of said region and, optionally, a sequence recognized by an RNA polymerase.